



# **Air Quality Permitting Statement of Basis**

**April 26, 2005**

**Permit to Construct No. P-050401<sup>410</sup>**

**Jayco, Inc., Twin Falls**

**Facility ID No. 083-00092**

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**FINAL**

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## **Acronyms, Units, and Chemical Nomenclatures**

<b>acfm</b>	<b>actual cubic feet per minute</b>
<b>AIRS</b>	<b>Aerometric Information Retrieval System</b>
<b>AQCR</b>	<b>Air Quality Control Region</b>
<b>DEQ</b>	<b>Department of Environmental Quality</b>
<b>EPA</b>	<b>U.S. Environmental Protection Agency</b>
<b>°F</b>	<b>degrees Fahrenheit</b>
<b>ft</b>	<b>feet</b>
<b>HAPs</b>	<b>hazardous air pollutants</b>
<b>IDAPA</b>	<b>a numbering designation for all administrative rules in Idaho promulgated in accordance with the Idaho Administrative Procedures Act</b>
<b>MMBtu/hr</b>	<b>million British thermal units per hour</b>
<b>MSDS</b>	<b>Material Safety Data Sheet(s)</b>
<b>O&amp;M</b>	<b>Operation and Maintenance</b>
<b>PM<sub>10</sub></b>	<b>particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers</b>
<b>PSD</b>	<b>Prevention of Significant Deterioration</b>
<b>PTC</b>	<b>permit to construct</b>
<b>Rules</b>	<b>Rules for the Control of Air Pollution in Idaho</b>
<b>RV</b>	<b>recreational vehicle</b>
<b>SM80</b>	<b>synthetic minor facility with a potential to emit greater than or equal to 80% of the major source threshold level(s)</b>
<b>TAPs</b>	<b>toxic air pollutants</b>
<b>T/yr</b>	<b>tons per any consecutive 12-month period</b>
<b>UTM</b>	<b>Universal Transverse Mercator</b>
<b>VOC</b>	<b>volatile organic compound</b>

## 1. PURPOSE

The purpose for this memorandum is to satisfy the requirements of IDAPA 58.01.01.200, *Rules for the Control of Air Pollution in Idaho*, for issuing permits to construct.

## 2. FACILITY DESCRIPTION

Jayco, Inc. (Jayco) is a recreational vehicle (RV) manufacturing facility located at 621 Washington Street So., Twin Falls. The facility consists of two processes; two RV assembly lines, and a woodworking operation. The facility also includes a 0.25 MMBtu/hr natural gas-fired boiler that is used for facility heating purposes. The entire site is fenced to control access.

## 3. FACILITY / AREA CLASSIFICATION

Jayco is classified as a synthetic minor facility because enforceable operational limits limit the facility's potential to emit to less than Tier I operating permit major source thresholds. The AIRS facility classification is "SM80" because the facility's potential to emit is greater than or equal to 80% of the major source threshold level(s). The SIC defining this facility is 3792.

The facility is located within AQCR 63 and UTM zone 11. The facility is located in Twin Falls County which is designated as unclassifiable for all regulated criteria air pollutants.

This PTC revision does not increase emissions and does not affect the AIRS facility classification. Therefore, the AIRS information does need to be updated. Refer to DEQ's January 13, 2005 statement of basis.

## 4. APPLICATION SCOPE

Jayco has submitted a PTC application to revise PTC No. P-040424, issued to Jayco on January 14, 2005. Jayco requests that DEQ correct two typographical errors from its December 20, 2004 permit application. The requested revision clarifies that the manufacturing process consists of two assembly lines (EU-L1 and EU-L2), not one, and that the Woodworking Operations is controlled by a dust collector and not a cyclone baghouse. Correcting the errors does not result in an emissions increase.

Jayco's December 20, 2004 PTC application established the facility's potential to emit based on the physical design capacity of the facility – 4 RV's per hour. The facility's physical design capacity is not increasing as a result of this PTC revision; likewise, the facility's potential to emit is not increasing.

### 4.1 Application Chronology

April 11, 2005	Jayco submitted an application to revise PTC No. P-040424
April 26, 2005	DEQ determined the application complete

## 5. PERMIT ANALYSIS

This section of the Statement of Basis describes the regulatory requirements for this PTC action:

### 5.1 Equipment Listing

This section revises Section 5.1 of Jayco's January 14, 2005 statement of basis.

Jayco's Twin Falls RV manufacturing facility consists of two RV assembly lines identified as EU-L1 and EU-L2, a woodworking operation identified as EU-W-1, and a 0.25 MMBtu/hr natural gas-fired boiler for space heating. Each emissions source is described below.

#### EU-L1 and EU-L2 – RV Assembly Lines

- Adhesive application by spray or rollcoat to secure parts
- Solvent wiping/degreasing to clean aluminum and fiberglass before applying decals
- Caulking to seal joints
- Touch-up painting and repair painting for scratches and maintenance (plastic, fiberglass, and metal substrates)
- Maximum capacity is four RV's per hour

Note, emissions from EU-L1 and EU-L2 are not vented to the atmosphere, rather, the emissions exhaust to the interior of the manufacturing building. The activities conducted in assembly lines EU-L1 and EU-L2 are inherently limited by the physical design capacity of the facility – 4 RV's per hour.

#### EU-W-1 – Woodworking Operations

- Saws
- Routers
- Milling equipment
- Maximum capacity is 5,000 pounds of processed wood per hour

Note, particulate matter generated from EU-W-1 is pneumatically conveyed to a dust collector. PM<sub>10</sub> emissions for EU-W-1 are not vented to the atmosphere, rather, the dust collector vent exhausts to the interior of the manufacturing building.

#### Natural Gas-fired Boiler

- |                                      |               |
|--------------------------------------|---------------|
| • Stack height (ft):                 | 30            |
| • Stack diameter (ft):               | 1.84          |
| • Exhaust gas flowrate (acfm):       | 104.4         |
| • Exhaust gas temperature (°F):      | 400           |
| • Maximum rated heat input capacity: | 0.25 MMBtu/hr |

Note, the boiler is the only point source at the facility. The boiler stack penetrates the southeast quarter of old section of the manufacturing building as identified in Figure 1 of Jayco's permit application.

## **5.2 Emissions Inventory**

Emissions are not increasing as a result of this PTC revision; therefore, a subsequent emissions inventory is not required. Refer to DEQ's January 13, 2005 statement of basis for the facility's emissions inventory.

### 5.3 Modeling

Emissions are not increasing as a result of this PTC revision; therefore, a subsequent modeling analysis is not required. Refer to DEQ's January 13, 2005 statement of basis for the facility's modeling analysis.

### 5.4 Regulatory Review

This section describes the regulatory analysis of the applicable air quality rules with respect to this PTC.

IDAPA 58.01.01.209.04..... Revisions of Permits to Construct

The Section of the Rules provides the regulations with respect to PTC revisions. This permit revision does not result in an increase in emission; therefore, an opportunity for public comment is not required.

IDAPA 58.01.01.224..... Permit to Construct Application Fee

Revisions to PTC's that correct typographical errors are exempt from the PTC application fee.

IDAPA 58.01.01.225..... Permit to Construct Processing Fee

Revisions to PTC's that correct typographical errors are not subject to PTC processing fees.

## 6. PERMIT CONDITIONS

This section describes only the changes made to the permit as a result of this PTC revision. Existing permit conditions are identified as "Existing Permit Conditions", and revised permit conditions are identified as "Revised Permit Conditions." Text that has been deleted is struck through. Text that has been added is underlined. Italics are used when unable to underline.

### 6.1 Permit to Construct Scope

Existing Table 1.1

Table 6.1 SUMMARY OF REGULATED SOURCES

Permit Section	Source Description	Emissions Control(s)
2	RV assembly line – EU-L1	Uncontrolled
3	Woodworking operations – EU-W-1	<del>Baghouse</del>

Revised Table 1.1

Table 6.2 SUMMARY OF REGULATED SOURCES

Permit Section	Source Description	Emissions Control(s)
2	RV assembly line – EU-L1	Uncontrolled
2	<i>RV assembly line – EU-L2</i>	<i>Uncontrolled</i>
3	Woodworking operations – EU-W-1	<i>Dust Collector</i>

### 6.2 Existing Permit Condition 2.1

#### 2.1 Process Description

The RV assembly ~~line~~, identified as process EU-L1, includes the following activities: adhesive application by spraying or rollcoating to secure parts, degreasing/solvent wiping to clean aluminum and fiberglass before applying decals, caulking to seal joints, and touch-up and repair painting for scratches and maintenance (plastic, fiberglass, and metal substrates). The physical design capacity of EU-L1 is four RV's per hour.

## Revised Permit Condition 2.1

### **2.1 Process Description**

The RV assembly lines, identified as process EU-L1 and EU-L2, includes the following activities: adhesive application by spraying or rollcoating to secure parts, degreasing/solvent wiping to clean aluminum and fiberglass before applying decals, caulking to seal joints, and touch-up and repair painting for scratches and maintenance (plastic, fiberglass, and metal substrates). The physical design capacity of EU-L1 and EU-L2 is four (4) RV's per hour.

## **6.3 *Existing Permit Condition 2.2***

### **2.2 Emissions Control Description**

Air quality emissions from EU-L1 include PM<sub>10</sub>, VOCs, and HAPs, all of which are exhausted to the interior of the manufacturing building. Emissions escaping to the atmosphere from the manufacturing building are fugitive emissions and are uncontrolled.

## Revised Permit Condition 2.2

### **2.2 Emissions Control Description**

Air quality emissions from EU-L1 and EU-L2 include PM<sub>10</sub>, VOCs, and HAPs, all of which are exhausted to the interior of the manufacturing building. Emissions escaping to the atmosphere from the manufacturing building are fugitive emissions and are uncontrolled.

## **6.4 *Existing Permit Condition 2.3***

### **2.3 HAP Emissions Limits**

- HAP emissions from EU-L1 shall be less than 10 tons per any consecutive 12-month period (T/yr) for any single HAP.
- HAP emissions from EU-L1 shall be less than 25 tons per any consecutive 12-month period (T/yr) for any combination of HAPs.

## Revised Permit Condition 2.3

### **2.3 HAP Emissions Limits**

- HAP emissions from EU-L1 and EU-L2 shall be less than 10 tons per any consecutive 12-month period (T/yr) for any single HAP.
- HAP emissions from EU-L1 and EU-L2 shall be less than 25 tons per any consecutive 12-month period (T/yr) for any combination of HAPs.

## **6.5 *Existing Permit Condition 2.4***

### **2.4 VOC Emissions Limit**

VOC emissions from EU-L1 shall not exceed 95 tons per any consecutive 12-month period (T/yr).

Revised Permit Condition 2.4

**2.4 VOC Emissions Limit**

VOC emissions from EU-L1 and EU-L2 shall not exceed 95 tons per any consecutive 12-month period (T/yr).

**6.6 *Existing Permit Condition 2.5***

**2.5 Material Purchase Records**

For process EU-L1, the permittee shall maintain the purchase records of all manufacturing-related materials that contain HAPs, TAPs, and VOCs including but not limited to, adhesives, caulks, degreasers, solvents, and paints. The purchase records shall remain on site for the most recent two year period and shall be made available to DEQ representatives upon request.

Revised Permit Condition 2.5

**2.5 Material Purchase Records**

For process EU-L1 and EU-L2, the permittee shall maintain the purchase records of all manufacturing-related materials that contain HAPs, TAPs, and VOCs including but not limited to, adhesives, caulks, degreasers, solvents, and paints. The purchase records shall remain on site for the most recent two year period and shall be made available to DEQ representatives upon request.

**6.7 *Existing Permit Condition 2.6***

**2.6 Material Safety Data Sheets**

For process EU-L1, the permittee shall maintain the MSDS' for the manufacturing-related materials that contain HAPs, TAPs, and VOCs purchased pursuant to Permit Condition 2.5. The MSDS' shall remain on site at all times and shall be made available to DEQ representatives upon request.

Revised Permit Condition 2.6

**2.6 Material Safety Data Sheets**

For process EU-L1 and EU-L2, the permittee shall maintain the MSDS' for the manufacturing-related materials that contain HAPs, TAPs, and VOCs purchased pursuant to Permit Condition 2.5. The MSDS' shall remain on site at all times and shall be made available to DEQ representatives upon request.

**6.8 *Existing Permit Condition 2.7***

**2.7 Material Usage Records**

For process EU-L1, the permittee shall monitor and record monthly, the usage of each manufacturing-related material that contains HAPs, TAPs, and VOCs. The usage records shall remain on site for the most recent two year period and shall be made available to DEQ representatives upon request.



Revised Permit Condition 2.7

**2.7 Material Usage Records**

For process EU-L1 and EU-L2, the permittee shall monitor and record monthly, the usage of each manufacturing-related material that contains HAPs, TAPs, and VOCs. The usage records shall remain on site for the most recent two year period and shall be made available to DEQ representatives upon request.

**6.9 *Existing Permit Condition 2.8***

**2.8 HAP Monitoring Requirements**

The permittee shall monitor and record the monthly and annual HAP emissions from EU-L1 using the purchase records required by Permit Condition 2.5, the MSDS' required by Permit Condition 2.6, and the material usage records required by Permit Condition 2.7 to demonstrate compliance with Permit Condition 2.3. Annual HAP emissions shall be determined by summing monthly HAP emissions over the previous consecutive 12-month period. Records of this information shall be maintained on site for the most recent two year period and shall be made available to DEQ representatives upon request.

Revised Permit Condition 2.8

**2.8 HAP Monitoring Requirements**

The permittee shall monitor and record the monthly and annual HAP emissions from EU-L1 and EU-L2 using the purchase records required by Permit Condition 2.5, the MSDS' required by Permit Condition 2.6, and the material usage records required by Permit Condition 2.7 to demonstrate compliance with Permit Condition 2.3. Annual HAP emissions shall be determined by summing monthly HAP emissions over the previous consecutive 12-month period. Records of this information shall be maintained on site for the most recent two year period and shall be made available to DEQ representatives upon request.

**6.10 *Existing Permit Condition 2.9***

**2.9 VOC Monitoring Requirements**

The permittee shall monitor and record the monthly and annual VOC emissions from EU-L1 using the purchase records required by Permit Condition 2.5, the MSDS' required by Permit Condition 2.6, and the material usage records required by Permit Condition 2.7 to demonstrate compliance with Permit Condition 2.4. Annual VOC emissions shall be determined by summing monthly VOC emissions over the previous consecutive 12-month period. Records of this information shall be maintained on site for the most recent two year period and shall be made available to DEQ representatives upon request.

## Revised Permit Condition 2.9

### 2.9 VOC Monitoring Requirements

The permittee shall monitor and record the monthly and annual VOC emissions from EU-L1 and EU-L2 using the purchase records required by Permit Condition 2.5, the MSDS' required by Permit Condition 2.6, and the material usage records required by Permit Condition 2.7 to demonstrate compliance with Permit Condition 2.4. Annual VOC emissions shall be determined by summing monthly VOC emissions over the previous consecutive 12-month period. Records of this information shall be maintained on site for the most recent two year period and shall be made available to DEQ representatives upon request.

## 6.11 Existing Permit Condition 3.1

### 3.1 Process Description

Woodworking operations consist of various saws, routers, milling equipment, and ~~one cyclone (CE-1), which is connected in series with a baghouse.~~ Waste wood material from the various woodworking operations is pneumatically conveyed to ~~eyelone CE-1. The gas stream exiting eyelone CE-1 is pneumatically conveyed to a baghouse,~~ which controls PM<sub>10</sub> emissions. The ~~baghouse~~ vent exhausts to the interior of the manufacturing building. The physical design capacity of EU-W-1 is 5,000 pounds of wood material per hour.

## Revised Permit Condition 3.1

### 3.1 Process Description

Woodworking operations consist of various saws, routers, milling equipment, and one dust collector (DC-1) which consists of a material handling fan, a hopper, and filter bags. Waste wood material from the various woodworking operations is pneumatically conveyed to the material handling fan. As dust enters the hopper section, heavier dust particles fall down into the inside collecting drum. The remaining dust travels into the inside of the filter bags, which controls PM<sub>10</sub> emissions. The dust collector vent exhausts to the interior of the manufacturing building. The physical design capacity of EU-W-1 is 5,000 pounds of wood material per hour.

## 6.12 Existing Permit Condition 3.2

### 3.2 Emissions Control Description

Air quality emissions from EU-W-1 are PM<sub>10</sub>. The PM<sub>10</sub> emissions are controlled by a ~~baghouse~~ that vents to the interior of the manufacturing building. Emissions escaping to the atmosphere from the manufacturing building are fugitive emissions and are uncontrolled.

## Revised Permit Condition 3.2

### 3.2 Emissions Control Description

Air quality emissions from EU-W-1 are PM<sub>10</sub>. The PM<sub>10</sub> emissions are controlled by a dust collector that vents to the interior of the manufacturing building. Emissions escaping to the atmosphere from the manufacturing building are fugitive emissions and are uncontrolled.

### **6.13 Existing Permit Condition 3.4**

#### **3.4 Baghouse Operations**

The ~~baghouse connected in series with cyclone CE-1~~ shall be operated whenever EU-W-1 operates.

Revised Permit Condition 3.4

#### **3.4 Dust Collector Operations**

The dust collector shall be operated whenever EU-W-1 operates.

### **6.14 Existing Permit Condition 3.5**

#### **3.5 Baghouse Maintenance**

The permittee shall maintain and operate the ~~baghouse connected in series with cyclone CE-1~~ according to manufacturer and O&M manual specifications.

Revised Permit Condition 3.5

#### **3.5 Dust Collector Maintenance**

The permittee shall maintain and operate the dust collector according to manufacturer and O&M manual specifications.

### **6.15 Existing Permit Condition 3.6**

#### **3.6 Operations and Maintenance Manual**

Within 60 days of issuance of this permit, the permittee shall have developed an O&M manual for the ~~baghouse connected in series with cyclone CE-1~~ to demonstrate compliance with General Provision 2. The O&M manual shall specify, at a minimum, the recommended type and number of bags, and the recommended ~~pressure drop operating range~~. The O&M manual shall remain on site at all times and shall be made available to DEQ representatives upon request.

Revised Permit Condition 3.6

#### **3.6 Operations and Maintenance Manual**

Within 60 days of issuance of this permit, the permittee shall have developed an O&M manual for the dust collector to demonstrate compliance with General Provision 2. The O&M manual shall specify, at a minimum, the recommended type and number of bags, and the recommended maintenance required to maintain the dust collector. The O&M manual shall remain on site at all times and shall be made available to DEQ representatives upon request.

## **7. PUBLIC COMMENT**

An opportunity for public comment is not required for a PTC revision that does not increase emissions.

## 8. RECOMMENDATION

Based on review of application materials, and all applicable state and federal rules and regulations, staff recommends that Jayco, Inc. be issued revised PTC No. P-050401. No public comment period is recommended, no entity has requested a comment period, and the project does not involve PSD requirements.

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